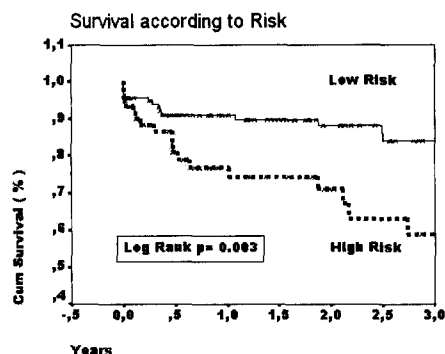


the 2 major predictors of death. After reclassification of patients into High Risk and Low Risk categories according to the presence of well established deleterious factors for CABG (LVEF < 35%, age > 75y, poor run off, renal failure, and obstructive lung disease) we estimated survival by KMA.



**Conclusions:** coronary stenting can be an alternative to CABG in low risk patients, with satisfactory 3 years outcome. In high risk patients for CABG this technique is feasible but the long term prognosis remains poor.

1126-16

### Primary Stenting With Abciximab in Acute Myocardial Infarction Complicated by Cardiogenic Shock (the ADMIRAL Trial)

Gilles Montalescot, Paul Barragan, Olivier Wittenberg, Simon Elhadad, Thierry Lefèvre, Christophe Loubeyre, Antoine Lafont, Michel Zupan, Franck Paganelli, Philippe Pinton, Pitié Salpêtrière Hospital, Paris, France.

Patients with acute myocardial infarction (AMI) in cardiogenic shock are at high-risk of mortality. In the randomized double blind ADMIRAL study, 300 patients undergoing primary stenting for AMI were allocated to either abciximab or placebo. Twenty five patients (8.3 percent) amongst them presented a cardiogenic shock (CS) within the first 24 hours: 7.3 percent in the abciximab group and 9.3 percent in the placebo group (P=0.55). The shock patients had more frequent dyslipidemia (P=0.01), prior myocardial infarction (P=0.02), prior PTCA (P=0.03) and diabetes (P=0.03) than non-shock patients. They were also more frequently male (P=0.05). The mortality rate was significantly higher in CS patients than in non-cardiogenic shock patients at 30 days (16 percent vs. 4 percent, respectively, P=0.008) and at 6 months (16 percent vs. 4.4 percent, P=0.01). The rate of TIMI grade 2 or 3 flow was lower in CS patients compared to the others, on admission (8.3 percent vs. 19.3 percent, P=0.34) and at 24 hours (83.3 percent vs. 94.8 percent, P=0.23). The 24-hour re-occlusion rate was also higher (16.7 percent vs. 6.5 percent, respectively P=0.34). In CS patients, the rate of TIMI grade 2 or 3 flow was slightly higher with abciximab compared to placebo (14.3 percent vs. 0.0 percent, P=0.34) as well as at 24 hours (100.0 percent vs. 83.3 percent, P=0.34); the 24-hour re-occlusion rate was lower with abciximab (0.0 percent vs. 33.3 percent, P=0.21). At both 30 days and 6 months, in CS patients, the primary endpoint including (death, myocardial infarction and urgent target vessel revascularization) tended to be lower with abciximab (9.1 percent versus 28.6 percent, P=0.23). Death was reduced by 57 percent with abciximab (9.1 percent vs. 21.4 percent, NS) at both 30 days and at 6 months. Considering the small sample size, these results must be interpreted cautiously. However shock patients are usually excluded from randomized trials and little information is available for this population. Primary stenting with abciximab in AMI complicated by cardiogenic shock appears to provide similar benefit as in the rest of the population of this trial. These results would need further confirmation in a specific trial.

1126-17

### Totally Occluded In-Stent Restenotic Lesions Treated With Intracoronary Radiation: Six-Month Clinical and Angiographic Follow-Up

Andrew E. Aiani, Edouard Cheneau, Dong-Hun Cha, Rosanna Chan, Hongsheng Wu, Hamid Yazdi, Daniel Canos, Augusto D. Pichard, Lowell F. Satler, Kenneth M. Kent, Joseph Lindsay, Ron Waksman, Washington Hospital Center, Washington, Dist. of Columbia.

**Background:** Conventional PTCA of totally occluded (TO) coronary arteries with in-stent restenosis (ISR) is associated with higher rates of restenosis and reocclusion. The purpose of this study was to evaluate the effectiveness of intracoronary radiation therapy (IRT) in patients (pts) with TO of ISR lesions. **Methods:** Out of 669 patients who were enrolled into the WRIST studies (Washington Radiation for In-Stent Restenosis Trial) treated with a  $\gamma$  emitter (Ir-192) and had 6-month clinical follow-up. 82 pts (12%) presented at entry with TO of the target lesion. Seventy-nine of these patients (94%) underwent successful intervention using balloon, laser angioplasty, or additional stents (39%) to obtain an adequate angiographic result (<30% diameter stenosis). **Results:** Angiographic and clinical outcomes comparing pts with TO versus non-occlusive lesions were similar except for higher rates of late total occlusion (LTO) in the TO group (Table). **Conclusions:** Total occlusion of ISR lesions at entry in the WRIST studies is not infrequent and has a successful recanalization with conventional percutaneous coronary intervention. Intracoronary  $\gamma$  radiation therapy for totally occluded ISR is feasible, safe and associated with similar outcomes to non-occlusive ISR.

	Total Occlusion (N=82)	Non-Total Occlusion (N=587)	P value
Angiographic Binary Restenosis, %	31	28	0.67
Death, %	4	3	0.70
Q-wave MI, %	3	1	0.36
TLR, %	20	20	0.95
TVR, %	24	28	0.41
Late Total Occlusion, %	12	5	0.03
MACE, %	25	30	0.42

1126-18

### Acute Coronary Syndrome is a Common Clinical Presentation of In-Stent Restenosis

Darren Walters, Scott Harding, Craig Walsh, Phillip Wong, Eugene Pomerantsev, Ik-kyung Jang, Massachusetts General Hospital, Boston, Massachusetts.

**Background:** Coronary stents have been the major advancement in percutaneous coronary intervention (PCI) in the last decade and are used in 60 - 80% of the patients. However, in-stent restenosis continues to be a problem, occurring in 20 - 30% of cases. The clinical presentation of patients who develop restenosis following stenting has not been well characterized. In this study we compared the clinical presentation of in-stent restenosis with that of PCI without stenting.

**Methods:** Of 742 patients who underwent PCI and had repeat catheterization between 10/1/97 and 6/30/00, 262 consecutive patients with recurrent ischemia and restenosis were identified: 191 patients with stenting (Group A) and 71 without stenting (Group B). Patients who underwent interventions in bypass grafts and those who developed early acute stent thrombosis were excluded from the study.

**Results:** Recurrent clinical ischemia occurred at a mean of 5.5 months for Group A and 6.4 months for Group B (p=0.24). Rest angina (Braunwald Class II and III) was more frequent in Group A compared to Group B (47 vs 23%, p<0.05). Acute coronary syndromes, the combination of rest angina and acute myocardial infarction, were also more frequent in Group A (67 vs 46%, p<0.05). Patients in Group A were more likely to have angiographically visible thrombus compared with those in Group B (9 vs 0%, p<0.05).

**Conclusions:** The acute coronary syndromes are a common clinical presentation of restenosis in patients undergoing repeat angiography and occur more frequently in patients with in-stent restenosis compared to those with balloon angioplasty restenosis.

1126-19

### One-Year Outcomes of Unprotected and Protected Left Main Stenting in the Current Era

Michael P. Kelley, Bruce D. Klugherz, Sayed M. Hashemi, Nicolas F. Meneveau, Janet M. Johnston, William H. Matthai, Jr., Vidya S. Banka, Howard C. Herrmann, John W. Hirschfeld, Jr., Daniel M. Kolansky, Phillip A. Horwitz, Francois Schiele, Jean-Pierre L. Bassand, Robert L. Wilensky, University of Pennsylvania Health System, Philadelphia, Pennsylvania, Cardiology Section, Hospital Jean Minjot, Besancon, France.

**Background:** Although coronary artery bypass surgery is the accepted treatment for left main coronary artery (LMCA) disease, improved coronary interventional techniques may facilitate a percutaneous approach. Data regarding patient outcomes following left main stenting remain limited.

**Methods:** We retrospectively reviewed outcomes among 135 consecutive patients who underwent protected (left coronary artery grafted) or unprotected LMCA stenting and for whom one-year follow-up was available. Death, myocardial infarction (MI), target-lesion revascularization (TLR), and the combined major adverse clinical event (MACE) rates were computed. Demographic and procedural variables were tested in univariate and multivariate prediction models.

**Results:** Mean age was  $68 \pm 10$  years and mean ejection fraction  $48 \pm 10\%$ . Ninety-four patients (70%) underwent protected and 41 patients (30%) underwent unprotected LMCA stenting. Cardiogenic shock was present in 6% of patients. Glycoprotein 2B/3A receptor antagonists were used in 58 patients (43%). Clinical follow-up was obtained in 95% of patients. Survival at one year was 88% for all patients (protected 95% and unprotected 71%), TLR 21%, and MACE 34%. For the 8 patients with cardiogenic shock, one-year survival was 50%. In a multivariate analysis, independent predictors of mortality included unprotected LMCA stent (odds ratio [OR] 8.7, 2.2-34.6, p=0.002) and cardiogenic shock (OR 6.0, 1.03-34.9, p=0.05). Congestive heart failure was a univariate predictor of survival (OR 3.3, 1.1-9.6, p=0.03). No univariate predictors of TLR were identified.

**Conclusion:** In the setting of protected LMCA disease, percutaneous intervention has an acceptable one-year survival. Survival is reduced following unprotected LMCA stenting in this selected population of poor surgical candidates. In contrast to previous outcomes analyses of patients undergoing coronary stenting, diabetes is not a predictor of left main TLR or MACE. Target-lesion revascularization for left main stents appears similar to stenting of other large coronary arteries.